Amdt. dated: November 12, 2004

Reply to Office action of August 12, 2004

Amendments to the Specification:

Please replace the Abstract with the following amended paragraph:

A data broadcast receiving apparatus includes a storage controlling unit and a reproduction controlling unit. The storage controlling unit-selectively stores data modules among a plurality of data modules included in received broadcast data, into a module storing unit. The storage controlling unit and also stores storage information for each of the plurality of data modules into a storage information storing unit, the storage information showing the presence or absence of the data module in the module storing unit, a reason of the absence of the data module, and the like. When the user selects a data module as a reproduction target, the reproduction controlling unit judges whether the data module is stored in the module storing unit. If the data module is stored in the module storing unit, the reproduction controlling unit reads the data module and produces a display corresponding to the data module on a TV screen. If the data module is not stored in the module storing unit, the reproduction controlling unit displays a message informing the user of the fact and reason that the data module is not stored in the module storing unit.

Please replace paragraph [0046] with the following amended paragraph:

[0046] For instance, the data module (ID number 0) which of the data module group 200 which comes first of all data modules includes a still image of the data broadcast menu, the channel information mentioned above, and link information showing that channel selection buttons "CH1" to "CH4" included in the menu respectively correspond to a data module (ID number 100) that makes up a data module group [200] 210 for a news channel, a data module (ID number 200) that makes up a data module group 220 for a weather channel, a data module (ID number 300) that makes up a data module group 230 for a music channel, and a data module (ID number 400) that makes up a data module group 240 for a money channel. This link information is used to specify content which

Amdt. dated: November 12, 2004

Reply to Office action of August 12, 2004

should be displayed next when the user selects a display object from the data broadcast menu (when the user presses one of the channel selection buttons).

Please replace paragraph [0105] with the following amended paragraph:

[0105] If the notification mode is voice, the reproduction controlling unit 160 notifies the user of the incomplete selection buttons through voice output (S348). The display of the reproduction target data module in this case may be any of normal display, pre-display, non-display, and flashing.

Please replace paragraph [0143] with the following amended paragraph:

[0143] The above embodiment describes the case where the invention is used for an apparatus that receives TV broadcasts via satellite, though this is not a limit for the invention, which may be widely used in an apparatus for receiving wire broadcasts or VOB VOD (video on demand) broadcasts, an apparatus for receiving electronic broadcast content via the Internet, such as a receiver equipped in a personal computer or a portable receiver equipped with a liquid crystal screen.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Currently Amended) A data broadcast receiving apparatus for receiving broadcast data that includes a plurality of data modules which are linked by link information, comprising:
 - module storing means for selectively storing data modules included in the received broadcast data;
 - storage information storing means for storing storage information corresponding to each of the plurality of data modules of the broadcast data, the storage information showing a storage state of the data module;
 - storage controlling means for, for each of the plurality of data modules of the broadcast data, (i) attempting to store the data module into the module storing means, (ii) if the storage of the data module has succeeded generating storage information showing a correspondence between the data module and a storage state of the data module, and storing the generated storage information into the storage information storing means, and (iii) if the storage of the data module has failed, generating storage information showing a correspondence between the data module, a storage state of the data module and a problem because of which the data module is not stored, and storing the generated storage information into the storage information storing means;

user indication accepting means for accepting an indication from a user; and reproducing means for

(a) judging whether a target data module which is specified in accordance with the user indication and the link information is stored in the module

- storing means, <u>based on storage information of the target data module in</u> the storage information storing means,
- (b) when the target data module is stored in the module storing means, reading the target data module from the module storing means, and reproducing and outputting the read target data module, and
- when the target data module is not stored in the module storing means, outputting first information for informing the user that the target data module is not stored and second information for informing the user of a problem because of which the target data module is not stored.
- 2. (Currently Amended) The data broadcast receiving apparatus of claim 1, wherein the reproducing means includes:
 - a judging unit for judging whether the target data module is stored in the module storing means, based on the storage information of the target data module in the storage information storing means; and
 - an informing unit for outputting the first information and the second information when the target data module is not stored in the module storing means.
- 3-4. (Cancelled)
- 5. (Currently Amended) The data broadcast receiving apparatus of claim [[4]] 2, wherein the informing unit outputs third information for suggesting a solution for the problem to the user, together with the first information and the second information.

Amdt. dated: November 12, 2004

Reply to Office action of August 12, 2004

(Original) The data broadcast receiving apparatus of claim 5, further comprising:
 user instruction accepting means for accepting an instruction from the user to implement the solution; and

solution implementing means for implementing the solution in accordance with the user instruction accepted by the user instruction accepting means.

- 7. (Currently Amended) The data broadcast receiving apparatus of claim 2,
 - wherein each of the plurality of data modules is made up of at least one set of resource information, and the judging unit judges whether all sets of resource information that make up the target data module are stored in the module storing means, in order to judge whether the target data module is stored in the module storing means, wherein when any of the sets of resource information of the target data module is not stored in the module storing means, the informing unit outputs the first information for informing the user that the set of resource information is not stored in the module storing means, and the reproducing means reads the other sets of resource information of the target data module from the module storing means, and reproduces and outputs the other sets of resource information.
 - if the storage of the data module has succeeded, the storage controlling means generates

 storage information showing a correspondence between the data module and a

 storage state indicating that all sets of resource information that make up the data

 module are stored,
 - if the storage of the data module has failed, the storage controlling means generates, (a) if

 none of the sets of resource information of the data module is stored, storage
 information showing a correspondence between the data module, a storage state
 indicating that none of the sets of resource information is stored, and a problem
 because of which none of the sets of resource information is stored, and (b) if a
 part of the sets of resource information of the data module is not stored, storage
 information showing a correspondence between the data module, a storage state

indicating that the part of the sets of resource information is not stored, and a problem because of which the part of the sets of resource information is not stored.

- the judging unit judges whether all sets of resource information that make up the target data module are stored in the module storing means, a part of the sets of resource information of the target data module is not stored in the module storing means, or none of the sets of resource information of the target data module is stored in the module storing means, based on the storage information of the target data module in the storage information storing means,
- when the judging unit judges that all of the sets of resource information of the target data

 module are stored in the module storing means, the reproducing means reads all

 of the sets of resource information of the target data module from the module

 storing means, and reproduces and outputs the read sets of resource information,
- when the judging unit judges that the part of the sets of resource information of the target

 data module is not stored in the module storing means, the reproducing means
 reads the other sets of resource information of the target data module from the
 module storing means and reproduces and outputs the read sets of resource
 information, and the informing unit outputs the first information for informing the
 user that the part of the sets of resource information is not stored, and the second
 information for informing the user of the problem because of which the part of the
 sets of resource information is not stored, and
- when the judging unit judges that none of the sets of resource information of the target

 data module is stored in the module storing means the informing unit outputs the

 first information for informing the user that none of the sets of resource

 information is stored, and the second information for informing the user of the

 problem because of which none of the sets of resource information of the target

 data module is stored.

Appl. No. 09/776,967 Amdt. dated: November 12, 2004

Reply to Office action of August 12, 2004

8. (Currently Amended) A- The data broadcast receiving apparatus for receiving broadcast data that includes a plurality of data modules which are linked by link information, comprising: module storing means for selectively storing data modules included in the received broadcast data; user indication accepting means for accepting an indication from a user; and reproducing means for (a) reading a target data module which is specified in accordance with the user indication and the link destination, from the module storing means, and reproducing and outputting the read target data module, (b) specifying of claim 1,

wherein the reproducing means specifies, prior to the reproduction of the target data module, data modules which are link destinations of the target data module and therefore may be indicated by the user as the next target data module, with reference to the link information, (e) judging judges whether the link destination data modules of the target data module are all stored in the module storing means based on storage information of the link destination data modules in the storage information storing means, and (d) when any of the link destination data modules of the target data module is not stored in the module storing means, informing informs the user that the link destination data module is not stored.

- 9. (Currently Amended) The data broadcast receiving apparatus of claim 8, wherein the reproducing means includes:
 - a judging unit for specifying the link destination data modules of the target data module with reference to the link information, and judging whether the link destination data modules are all stored in the module storing means <u>based on the storage</u> information of the link destination data modules in the storage information storing means; and
 - an informing unit for informing, when any of the link destination data modules is not stored in the module storing means, the user that the link destination data module is not stored.

- 10. (Original) The data broadcast receiving apparatus of claim 9,
 - wherein the target data module includes display objects corresponding to the link destination data modules, and
 - the informing unit informs the user that the link destination data module is not stored, by displaying a display object corresponding to the link destination data module which is not stored, in a different manner from the other display objects corresponding to link destination data modules which are stored.
- 11. (Original) The data broadcast receiving apparatus of claim 9,
 - wherein the target data module includes display objects corresponding to the link destination data modules, and
 - the informing unit informs the user that the link destination data module is not stored, by not displaying a display object corresponding to the link destination data module which is not stored.
- 12. (Original) The data broadcast receiving apparatus of claim 9,
 - wherein the target data module includes display objects corresponding to the link destination data modules, and
 - the informing unit informs the user that the link destination data module is not stored, by flashing a display object corresponding to the link destination data module which is not stored, on and off.
- 13. (Original)₌ The data broadcast receiving apparatus of claim 9,
 - wherein the informing unit informs the user that the link destination data module is not stored, by means of voice output.
- 14. (Currently Amended) A data broadcast receiving method for use in an apparatus for receiving broadcast data that includes a plurality of data modules which are linked by link

information, the apparatus including a module storing unit and a storage information storing unit, the data broadcast receiving method comprising: a module storing

a storage controlling step for selectively storing, for each of the plurality of data modules included in of the received broadcast data, into the storage unit; broadcast data, (i) attempting to store the data module into the module storing unit, and (ii) if the storage of the data module has succeeded, generating storage information showing a correspondence between the data module and a storage state of the data module, and storing the generated storage information into the storage information storing unit, and (iii) if the storage of the data module has failed, generating storage information showing a correspondence between the data module, a storage state of the data module and a problem because of which the data module is not stored, and storing the generated storage information into the

a user indication accepting step for accepting an indication from a user; and a reproducing step for

storage information storing unit;

- (a) judging whether a target data module which is specified in accordance with the user indication and the link information is stored in the module storage unit, based on storage information of the target data module in the storage information storing unit,
- (b) when the target data module is stored in the <u>module</u> storage unit, reading the target data module from the <u>module</u> storage unit, and reproducing and outputting the read target data module, and
- when the target data module is not stored in the <u>module</u> storage unit, outputting first information for informing the user that the target data module is not stored and second information for informing the user of a <u>problem because of which the target data module is not stored.</u>

15-20. (Cancelled)

- 21. (Currently Amended) A computer-readable recording medium recording a program for use in an apparatus for receiving broadcast data that includes a plurality of data modules which are linked by link information, the apparatus including a module storing unit and a storage information storing unit, the computer program comprising: a module storing
 - a storage controlling step for selectively storing, for each of the plurality of data modules included in of the received broadcast data, into the storage unit; broadcast data, (i) attempting to store the data module into the module storing unit, (ii) if the storage of the data module has succeeded, generating storage information showing a correspondence between the data module and a storage state of the data module, and storing the generated storage information into the storage information storing unit, and (iii) if the storage of the data module has failed, generating storage information showing a correspondence between the data module, a storage state of the data module, and a problem because of which the data module is not stored, and storing the generated storage information into the storage information storing unit;

a user indication accepting step for accepting an indication from a user; and a reproducing step for

- (a) judging whether a target data module which is specified in accordance with the user indication and the link information is stored in the module storage unit, based on storage information of the target data module in the storage information storing unit,
- (b) when the target data module is stored in the <u>module</u> storage unit, reading the target data module from the <u>module</u> storage unit, and reproducing and outputting the read target data module, and
- when the target data module is not stored in the <u>module</u> storage unit, outputting first information for informing the user that the target data module is not stored and second information for informing the user of a <u>problem because of which the target data module is not stored</u>.

- 22. (Currently Amended) A computer-readable recording medium recording a <u>computer</u> program for use in an apparatus for receiving broadcast data that includes a plurality of data modules which are linked by link information, the apparatus including a <u>module</u> storing unit and a storage <u>information storing</u> unit, the <u>computer</u> program comprising: -a <u>module storing</u>
 - a storage controlling step for selectively storing data modules included in the received broadcast data, into the storage unit; , for each of the plurality of data modules of the broadcast data, (i) attempting to store the data module into the module storing unit, (ii) if the storage of the data module has succeeded, generating
 - storage information showing a correspondence between the data module and a storage state of the data module, and storing the generated storage information into the storage information storing unit, and (iii) if the storage of the data module has failed, generating storage information showing a correspondence between the data module, a storage state of the data module, and a problem because of which the data module is not stored, and storing the generated storage information into the storage information storing unit;

a user indication accepting step for accepting an indication from a user; and a reproducing step for

- (a) reading judging whether a target data module which is specified in accordance with the user indication and the link destination, from the information is stored in the module storage unit, based on storage information of the target data module in the storage information storing unit,
- when the target data module is stored in the module storage unit, reading the target data module from the module storage unit, and reproducing and outputting the read target data module, specifying, prior to the reproduction of the target data module, data modules which are link destinations of the target data module and therefore may be indicated by

Amdt. dated: November 12, 2004

Reply to Office action of August 12, 2004

the user as the next target data module, with reference to the link information, and

(c) judging whether the link destination data modules of the target data module are all stored in the storage unit, and (d) when any of the link destination data modules of when the target data module is not stored in the module storage unit, outputting first information for informing the user that the link destination target data module is not stored and second information for informing the user of a problem because of which the target data module is not stored.